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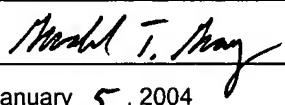
Total Number of Pages in This Submission

Application Number	10/602,548
Filing Date	June 23, 2003
First Named Inventor	Tang, Hongxing
Art Unit	2518
Examiner Name	Unassigned
Total Number of Pages in This Submission	Attorney Docket Number 009195-000520US

**ENCLOSURES (Check all that apply)**

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input checked="" type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input checked="" type="checkbox"/> Statement Under 35 CFR 3.73(b)	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
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<input type="checkbox"/> Response to Missing Parts/ Incomplete Application		
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		
		Remarks
The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.		

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm or Individual	Townsend and Townsend and Crew LLP Gerald T. Gray	
Signature		
Date	January 5, 2004	

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Sylvia E. Arnold		
Signature		Date	January 5, 2004



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**POWER OF ATTORNEY OR  
AUTHORIZATION OF AGENT**

<b>Application Number</b>	10/602,548
<b>Filing Date</b>	June 23, 2003
<b>First Named Inventor</b>	Hongxing Tang et al.
<b>Title</b>	SENSORS BASED ON GIANT PLANAR HALL EFFECT IN DILUTE MAGNETIC SEMICONDUCTORS
<b>Art Unit</b>	2818
<b>Examiner Name</b>	Unassigned
<b>Attorney Docket Number</b>	009195-000520US

I hereby appoint:

Practitioners at Customer Number

**20350**

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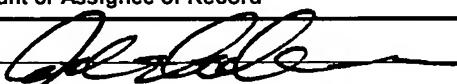
Fax

I am the:

Applicant/Inventor.

Assignee of record of the entire interest. See 37 CFR 3.71.  
*Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).*

**SIGNATURE of Applicant or Assignee of Record**

Name	Adam Cochran		
Signature	The Intellectual Property Counsel		
Date	DEC 15 2003	Telephone	

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

\*Total of forms are submitted.

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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## **ASSIGNMENT OF PATENT APPLICATION**

## JOINT

WHEREAS, Hongxing Tang of 195 S. Wilson Avenue, #11, Pasadena, CA 91106 and Michael L. Roukes of 1420 San Pasqual, Pasadena, CA 91106 hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

**Title of Invention:** SENSORS BASED ON GIANT PLANAR HALL EFFECT IN DILUTE MAGNETIC SEMICONDUCTORS

Date(s) of execution of Declaration:

Filing Date: June 23, 2003

Application No.: 10/602,548; and

WHEREAS, California Institute of Technology, located at California Institute of Technology, 1201 East California Blvd., Mail Code 305-6, Pasadena, CA 91125, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignment

Attorney Docket No.: 009195-000520US

Page 2

Assignors further agree that they will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: 10/17/03



Hongxing Tang

Dated: 10/17/03



Michael L. Roukes

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